

REMARKS

Applicants appreciate the thorough examination of the present application as evidenced by the Office Action mailed November 28, 2008 (hereinafter "Office Action"). In response, Applicants have amended the Specification to address the Section 101 rejection. Applicants respectfully submit, however, that the cited references fail to disclose or suggest, at least, all of the recitations of independent Claims 1, 8, and 15. Accordingly, Applicants submit that all pending claims are in condition for allowance. Favorable reconsideration of all pending claims is respectfully requested for at least the reasons discussed hereafter.

Section 101 Rejection

Claims 15 - 21 stand rejected under 35 U.S.C. §101 because of the description in the Specification that the computer readable medium may include a signal that can communicate, propagate or transport a program. (Office Action, page 2). While Applicants do not concede that a signal is a non-statutory example of a computer-readable storage medium, to advance prosecution and to facilitate an early allowance of the present application, Applicants have amended the Specification as indicated above to remove the references to the computer readable medium being any medium that can communicate, propagate, or transport a program. Accordingly, Applicants submit that Claims 15 - 21 qualify as statutory subject matter under 35 U.S.C. §101.

Independent Claims 1, 8, and 15 are Patentable

Independent Claims 1 and 8 stand rejected under 35 U.S.C. §102(e) as being anticipated by U. S. Patent Publication No. 2004/0190548 to Harel et al. (hereinafter "Harel"). (Office Action, pages 2 and 3). Independent Claim 15 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Harel. (Office Action, page 4). Independent Claim 1 is directed to a method of operating a multiprotocol label switching (MPLS) network, and recites:

establishing a label switched path (LSP) that connects a first provider edge (PE) label switched router (LSR) a second PE LSR, and a customer edge (CE) LSR;

encapsulating packet traffic that is associated with a plurality of different layer two technologies with a common MPLS label that identifies the LSP; and

securely routing the encapsulated packet traffic from the first PE LSR through the second PE LSR to the CE LSR using the LSP. (Emphasis added).

Independent Claims 8 and 15 include similar recitations. According to the recitations of Claim 1, an LSP is established and packet traffic that is associated with a plurality of different layer two technologies is encapsulated with a common MPLS label. The encapsulated packet traffic associated with the multiple layer two technologies is routed using the same LSP. Thus, embodiments of the present invention may aggregate traffic associated with multiple layer two technologies onto a single LSP.

In sharp contrast, Harel describes accepting input data from a packet source 32 and a time division multiplexed (TDM) source 30. An integrated transport device (ITD) encapsulates the data from both the packet source 32 and the TDM source 30 into packets for transmission over a network 28. (Harel, paragraphs 84 and 87 - 93; FIGS. 1 and 2). In sharp contrast to the recitations of independent Claim 1, however, Harel does not disclose or suggest aggregating the packets associated with the packet source 32 and the packets associated with the TDM source 30 onto the same LSP. Applicants acknowledge that Harel suggests that MPLS may be used to carry packets through the network 28, but Harel states that the packets are transmitted using MPLS tunnels. (Harel, paragraph 84). That is, Harel envisions multiple MPLS tunnels, i.e., multiple LSPs being used to carry the packets associated with the packet source 32 and the TDM source 30. Applicants cannot find any disclosure or suggestion in Harel that a single LSP be used to carry packet traffic associated with the packet source 32 and packet traffic associated with the TDM source 30.

The Office Action cites paragraph 34 from the "Summary of the Invention" section of Harel as teaching the use of MPLS tunnels for carrying packets through the network 28. (Office Action, pages 5 - 6). The Office Action further alleges that the purpose of MPLS is to ensure that all packets in a particular flow take the same route over a network backbone. (Office Action, page 6) and that data from the TDM source 30 and the packet source 32 are encapsulated into packets and transmitted through an MPLS tunnel. Even though there may

be multiple tunnels, each encapsulated packet is transmitted through a tunnel. (Office Action, page 6). It appears that the Office Action is alleging that data from the TDM source 30 and packets from the packet source 32 are encapsulated together into a single packet, which is then transmitted over a single LSP.

Applicants disagree that Harel teaches the use of a single LSP to carry packet traffic associated with different layer two technologies, by, for example, encapsulating TDM data and packet data in a single packet to be transmitted over a single LSP. In fact, Applicants submit that Harel teaches against using the same LSP to carry packet traffic associated with different layer two technologies. In paragraph 84, Harel states that the MPLS transport through the network may be performed using the scheme described in Martini et al. as described in the "Background of the Invention" section. The Martini et al. scheme is described in paragraph 17 of Harel and involves the use of a "pseudo wire" (PW) label to identify the particular layer two service to be used for processing a packet. Importantly, paragraph 17 states: "...The PW type specifies **the type of layer 2 service to be carried between the tunnel endpoints**,...The PW ID is used by the layer 2 service endpoints to **associate the locally-configured service with the tunnel**." Thus, the Martini scheme, which is used in Harel's system, associates a particular layer two service with a particular tunnel through a pseudo wire label. This means that Harel limits a LSP to carrying traffic associated with a single layer two technology, not multiple layer two technologies as recited in the pending independent claims. Thus, Harel does not disclose or suggest encapsulating data from a TDM source 30 with packets from a packet source 32 because it would not be possible to assign a PW label to the packet to identify the particular layer two service to be used for processing the packet.

For at least the foregoing reasons, Applicants respectfully submit that independent Claims 1, 8, and 15 are patentable over Harel and that Claims 2 - 7, 9 - 14, and 16 - 21 are patentable at least per the patentability of independent Claims 1, 8, and 15.

Various Dependent Claims are Separately Patentable

Dependent Claims 4 and 11 stand rejected under 35 U.S.C. §102(e) as being anticipated by Harel. (Office Action, pages 2 - 3). Dependent Claim 18 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Harel. (Office Action, page 4).

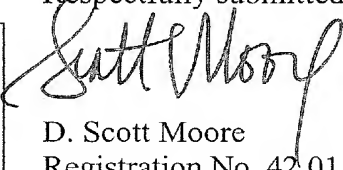
Applicants submit that dependent Claims 4, 11, and 18 are patentable at least per the patentability of independent Claims 1, 8, and 15, respectively. Applicants further submit that dependent Claims 4, 11, and 18 are separately patentable because Harel does not disclose or suggest statically provisioning an MPLS label between a PE LSR and a CE LSR and stitching the statically provisioned MPLS label to a signaled LSP that connects first and second PE LSRs. The Office Action cites paragraphs 97 and 98 of Harel as disclosing the recitations of Claims 4, 11, and 18 (Final Action, page 3), but these paragraph describes the multiplexing and demultiplexing of packets onto the network 28 and do not provide any disclosure with respect to stitching a statically provisioned MPLS label to a signaled LSP. Applicants submit, therefore, that dependent Claims 4, 11, and 18 are separately patentable over Harel for at least these additional reasons.

CONCLUSION

In light of the above amendments and remarks, Applicants respectfully submit that the above-entitled application is now in condition for allowance. Favorable reconsideration of this application, as amended, is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

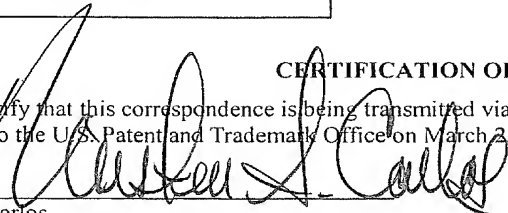
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CERTIFICATION OF TRANSMISSION

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on March 2, 2009.


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